

Aberdeen Proving Ground Dismantles Older Buildings before Demolition - - Saving Public Money and Resources

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The Directorate of Safety, Health and Environment (DSHE) and the Directorate of Public Works (DPW) at Aberdeen Proving Ground are working together to salvage usable materials from older buildings before demolition to reduce wastes, maximize valuable resources and save money. In a time of reducing operating budgets and expanding requirements to reduce hazardous and solid wastes by 50% by 1999, APG is seizing a golden opportunity. Building dismantlement and maximized material reuse will carry a lot of weight toward successfully meeting both of these monumental goals. Dismantlement, or deconstruction, is the taking down of a building the opposite way in which it was constructed, so that the building materials and components can be separated and easily reused.

On September 26, 1997, a group of experts working with the Department of Defense specializing in building dismantlement and material salvage visited Aberdeen and toured some of its buildings slated for demolition. This group included: Ms. Robin Snyder, U.S. EPA Office of Policy Development, Mr. Standen Cook, Fort Ord Reuse Authority, and Mr. Philip Kreitner, Wood Resource Efficiency Network. The visitors are a part of a team dismantling buildings at Fort Ord, Marina, CA, a base closed through the Base Realignment and Closure program. They are salvaging the raw materials and components from all buildings on Fort Ord for many other uses, including donations to Habitat for Humanity.

They were hosted at APG by Mr. Avery Nooncaster, DPW, and Mr. Robert Solyan and Ms. Elizabeth Longenecker, DSHE. The group toured three buildings which once served as barracks and offices. Many APG building appliances and components are already reclaimed for reuse prior to demolition, however as the visitors toured the selected buildings, they provided some recommendations for increasing material reclamation opportunities. For example, the visitors suggested expanding the current list to include such components as windows, plank subflooring, floor joists and framing timbers for reuse, and carpets, roofing shingles, concrete and gypsum wallboard for recycling.

The visitors noted that many of the buildings at APG are constructed of old growth yellow pine, which is in high demand and is well paid for by the high-end housing market. Aberdeen, until about 10-15 years ago, included a salvage provision in all construction contracts; there was also a salvage program that provided for an on-Post wood yard to collect these salvaged materials. The visitors stated that this system could be resurrected and modified to fit Aberdeen's current needs. As it once did, APG could serve as its own secondary market for salvaged materials, substituting salvaged parts for new materials in construction projects and routine maintenance, where appropriate. Prior

to demolition, an environmental evaluation of each building is conducted. During this evaluation, the predominant salvageable structural members, the dimensions and wood species, each with a rough quantity, should be identified (i.e. rafters-2x8-16', approximately 150 ea.). Then, whatever materials could not be utilized for projects on post could be made available to the DRMO, or other local salvaged material users, like the Loading Dock or Habitat for Humanity. The DSHE staff will work with the APG Legal Office and Habitat for Humanity to investigate donating salvaged materials; should Habitat for Humanity be able to indemnify or insure their volunteers so that they can perform the dismantlement, APG could eliminate these costs.

The DSHE Pollution Prevention Office and the DPW are looking forward to working together over the coming year to analyze the feasibility and the potential cost savings associated with the implementation of each of the recommendations of the visiting dismantlement team. Building a sustainable infrastructure through the reuse of valuable materials is a win-win-win situation - - a win for the Department of Defense, the public, and the environment!